

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IFW

Applicant: Yunhai Cui et al.

Title: DOUBLE-TRANSFECTED CELL LINE USEFUL FOR THE IDENTIFICATION OF  
TRANSPORT INHIBITORS

Docket No.: 1710.002US1

Filed: December 5, 2003

Examiner: Unknown



Serial No.: 10/729,861

Due Date: August 5, 2004

Group Art Unit: 1641

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

☒ A return postcard.

☒ An Information Disclosure Statement (2 pgs.), Form 1449 (4 pgs.), copies of 45 cited documents, and copy of Search Report (3 pgs.).

If not provided for in a separate paper filed herewith, Please consider this a **PETITION FOR EXTENSION OF TIME** for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
Customer Number 21186

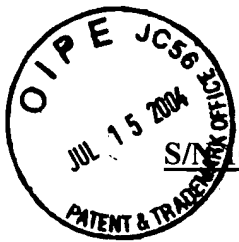
By: William F. Prout  
Atty: William F. Prout  
Reg. No. 33,995

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 31<sup>st</sup> day of July, 2004.

PATRICIA A. HULTMAN  
Name

Patricia A. Hultman  
Signature

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
(GENERAL)



S/N 10/729,861

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Yunhai Cui et al.	Examiner:	Unknown
Serial No.:	10/729,861	Group Art Unit:	1641
Filed:	December 05, 2003	Docket:	1710.002US1
Title:	DOUBLE-TRANSFECTED CELL LINE USEFUL FOR THE IDENTIFICATION OF TRANSPORT INHIBITORS		

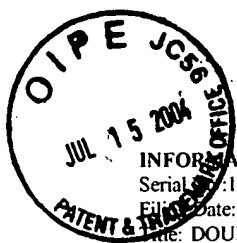
**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

The PTO did not receive the following  
listed item(s) two references marked  
with an asterisk "\*" under the  
Cite No. column on the form 1449



INFORMATION DISCLOSURE STATEMENT

Serial No.: 10/729,861

Filing Date: December 05, 2003

Title: DOUBLE-TRANSFECTED CELL LINE USEFUL FOR THE IDENTIFICATION OF TRANSPORT INHIBITORS

Page 2  
Dkt: 1710.002US1

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

A portion of the attached documents were discovered as a result of a Search Report in Applicants' corresponding foreign patent application. Enclosed for the Examiner's information is a copy of all cited documents and a copy of the Search Report.

Respectfully submitted,

YUNHAI CUI ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
(612) 373-6968

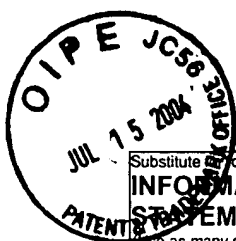
Date July 13, 2004

By William F. Prout  
William F. Prout  
Reg. No. 33,995

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 13th day of July, 2004.

PATRICIA A. HULTMAN  
Name

[Signature]  
Signature



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute Form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

	<b>Application Number</b>	10/729,861
	<b>Filing Date</b>	December 5, 2003
	<b>First Named Inventor</b>	Cui, Yunhai
	<b>Group Art Unit</b>	1641
	<b>Examiner Name</b>	Unknown
Sheet 1 of 4		Attorney Docket No: 1710.002US1

**US PATENT DOCUMENTS**

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
--------------------	---------------------	------------------	---	-------	----------	----------------------------

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T <sup>2</sup>
--------------------	---------------------	------------------	---	-------	----------	----------------

**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		ABE, T , et al., "Identification of a Novel Gene Family Encoding Human Liver-Specific Organic Anion Transporter LST-1", <u>Journal of Biological Chemistry</u> , 274(24), (June 11, 1999),17159-17163	
		ACOCCELLA, G , "Clinical Pharmacokinetics of Rifampicin", <u>Clin Pharmacokinet</u> , (1978),3:108-127	
		ALLEN, L , et al., "The Inhibition of Gammaglutamyl Transpeptidase from Human Pancreatic Carcinoma Cells by (Alpha S, 5S)-Alpha-Amino-3-Chloro-4, 5-Dihydro-5-Isoxazoleacetic Acid (AT-125; NSC-163501)", <u>Res Commun Chem Pathol Pharmacol</u> , (1980),27:175-182	
		BORST, P , et al., "A Family of Drug Transporters: The Multidrug Resistance-Associated Proteins", <u>Natl Cancer Inst.</u> , 92(16), (August 16, 2000),1295-302	
		BUCHLER, M. , et al., "cDNA cloning of the hepatocyte canalicular isoform of the multidrug resistance protein, cMrp, reveals a novel conjugate export pump deficient in hyperbilirubinemic mutant rats", <u>Journal of Biological Chemistry</u> , 271(25), (June 21, 1996),15091-15098	
		CANTZ, TOBIAS , et al., "MRP2, A Human Congugate Export Pump, is Present and Transports Fluo 3 into Apical Vacuoles of Hep G2 Cells", <u>Am Jour Physiol Gastrointest Liver Physiol</u> , (2000),278:G522-G531	
		COMBES, B , "The Importance of Conjugation with Glutathione for Sulfobromophthalein Sodium (BSP) Transfer from Blood to Bile", <u>J Clin Invest</u> , (1965),44:1214-1222	
		CUI, YANHAI , et al., "Drug Resistance and ATP-Dependent Conjugate Transport Mediated by the Apical Multidrug Resistance Protein, MRP2, Permanently Expressed in Human and Canine Cells", <u>The Am Pharmacology and Experimental Therapeutics</u> , (1999),55:929-937	
		CUI, YUNHAI , et al., "Hepatic Uptake of Bilirubin and Its Conjugates by the Human Organic Anion Transporter SLC21A6", <u>Journal of Biological Chemistry</u> , 276(13), (March 30, 2001),9626-9630	
		CUI, YUNHAI , et al., "Vectorial Transport by Double-Transfected Cells Expressing the Human Uptake Transporter SLC21A8 and the Apical Export Pump ABCB2", <u>The Am Society for Pharm and Experimental Therapeutics</u> , (2001),60:934-943	
		EVERS, RAYMOND , et al., "Drug Export Activity of the Human Canalicular	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

<b>Application Number</b>	10/729,861
<b>Filing Date</b>	December 5, 2003
<b>First Named Inventor</b>	Cui, Yunhai
<b>Group Art Unit</b>	1641
<b>Examiner Name</b>	Unknown

Sheet 2 of 4

Attorney Docket No: 1710.002US1

**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	*	Multispecific Organic Anion Transporter in Polarized Kidney MDCK Cells Expressing cMOAT *MRP2) cDNA", <u>The Am Society for Clinical Investigation, Inc.</u> , (1998),1310-1319	
		GERLOFF, T , et al., "The Sister of P-Glycoprotein Represents the Canalicular Bile Salt Export Pump of Mammalian Liver", <u>J Biol Chem</u> , (1998),273:10046-10050	
		HORI, R , et al., "Transport of Organic Anion in the OK Kidney Epithelial Cell Line", <u>Am J Physiol</u> , (1993),264:F975-980	
		HOSUYAMADA, M. , et al., "Molecular Cloning and Functional Expression of a Multispecific Organic Anion Transporter from Human Kidney", <u>Am J Physiol</u> , (1999),276:F122-128	
		HSIANG, BONNIE , et al., "A novel human hepatic organic anion transporting polypeptide (OATP2). Identification of a liver-specific human organic anion transporting polypeptide and identification of rat and human hydroxymethylglutaryl-CoA reductase inhibitor transporters", <u>Journal of Biological Chemistry</u> , 274(52), (December 24, 1999),37161-37168	
		ISHIZUKA, H , et al., "Species Differences in the Transport Activity for Organic Anions Across the Bile Canalicular Membrane", <u>J Pharmacol Exp Ther</u> , (1999),290:1324-1330	
		ITO, K , et al., "Functional Analysis of a Canalicular Multispecific Organic Anion Transporter Cloned from Rat Liver", <u>J Biol Chem</u> , (1998),273:1684-1688	
		ITO, K , et al., "Molecular Cloning of Canalicular Multispecific Organic Anion Transporter Defective in EHBR", <u>Am J Physiol</u> , (1997),272:G16-22	
		JANSEN, P , "Foreword: From Classic Bile Physiology to Cloned Transporters", <u>Semin Liver Dis</u> 2000, (2000),20:245-250	
		JANSEN, P , et al., "Selective Hepatobiliary Transport Defect for Organic Anions and Neutral Steroids in Mutant Rats with Heredity-Conjugated Hyperbilirubinemia", <u>Hepatology</u> , (1987),7:71-76	
		KEPPLER, D , et al., "Hepatic Canalicular Membrane - Intro: Transport Across the Hepatocyte Canalicular Membrane", <u>FASEB J</u> , (1997),11:15-18	
		KEPPLER, D , et al., "The Canalicular Conjugate Export Pump Encoded by the CMRP/CMOAT Gene", <u>Prog Liver Dis</u> , (1996),14:55-67	
		KEPPLER, D , et al., "Transport Function and Substrate Specificity of Multidrug Resistance Protein", <u>Methods Enzymol</u> , (1998),292:607-616	
		KLAASSEN, C , et al., "Species Variation in Metabolism, Storage and Excretion of Sulfobromophthalein", <u>Am J Physiol</u> , (1967),213:1322-1326	
		KONIG, J , et al., "A Novel Human Organic Anion Transporting Polypeptide Localized to the Basolateral Hepatocyte Membrane", <u>Am J Physiol Gastrointest Liver Physiol</u> , (2000),278:G156-G164	
		KONIG, J , et al., "Conjugate Export Pumps of the Multidrug Resistance Protein (MRP) Family: Localization, Substrate Specificity, and MRP2-Mediated Drug	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional) <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

<b>Application Number</b>	10/729,861
<b>Filing Date</b>	December 5, 2003
<b>First Named Inventor</b>	Cui, Yunhai
<b>Group Art Unit</b>	1641
<b>Examiner Name</b>	Unknown

Sheet 3 of 4

Attorney Docket No: 1710.002US1

**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	*	Resistance", <u>Biochim Biophys Acta</u> , (1999),1461:377-394	
		KONIG, J , et al., "Localization and Genomic Organization of a New Hepatocellular Organic Anion Transporting Polypeptide", <u>J Biol Chem</u> , (2000),275:23161-23168	
		KULLAK-UBLICK, G , et al., "Hepatic Transport of Bile Salts", <u>Semin Liver Dis</u> , (2000),20:273-293	
		KULLAK-UBLICK, GERALD A., et al., "Organic Anion-Transporting Polypeptide B(OATP-B) and its Functional Comparison with Three Other OATPs of Human Liver", <u>Division of Chemical Pharm and Toxicology, Dept of Medicine, Univ Hospital, Zurich CH; and Institute of Anatomy, Univ of Basel, Basel, CH</u> , (2001),120:525-533	
		LEIER, INKA , et al., "ATP-dependent para-aminohippurate transport by apical multidrug resistance protein MRP2", <u>Kidney International</u> , Vol. 57,(2000),1636-1642	
		LI, L , et al., "Identification of Glutathione as a Driving Force and Leukotriene C4 as a Substrate for Oatpl, the Hepatic Sinusoidal Organic Solute Transporter", <u>J Biol Chem</u> , (1998),273:16184-16191	
		MADON, J , et al., "Functional Expression of the Rat Liver Canalicular Isoform of the Multidrug Resistance-Associated Protein", <u>FEBS Lett</u> , (1997),406:75-78	
		MINTA, A , et al., "Fluorescent Indicators for Cytosolic Calcium Based on Rhodamine and Fluorescein Chromophores", <u>J Biol Chem</u> , (1989),264:8171-8178	
		NIES, A , et al., "Expression of the Apical Conjugate Export Pump, Mrp2, in the Polarized Hepatoma Cell Line, WIF-B", <u>Hepatology</u> , (1998),28:1332-1340	
		PAULUSMA, C , et al., "Congenital Jaundice in Rats with a Mutation in a Multidrug Resistance-Associated Protein Gene", <u>Science</u> , (1996),271:1126-1128	
		SAMBROOK, "Molecular Cloning", <u>A Laboratory Manual</u> , Cold Spring Harbor Laboratory,(2001),	
		SCHARSCHMIDT, B , et al., "Hepatic Organic Anion Uptake in the Rat", <u>J Clin Invest</u> , (1975),56:1280-1292	
		SCHAUB, T , et al., "Expression of the MRP2 Gene-Encoded Conjugate Export Pump in Human Kidney Proximal Tubules and in Renal Cell Carcinoma", <u>J Am Soc Nephrol</u> , (1999),10:1159-1169	
		SNEL, C , et al., "Glutathione Conjugation of Bromosulphophthalein in Relation to Hepatic Glutathione Content in the Rat in Vivo and in the Perfused Rat Liver", <u>Hepatology</u> , (1995),21:1387-1394	
		STRAUTNIEKS, S , et al., "A Gene Encoding A Liver-Specific ABC Transporter is Mutated in Progressive Familial Intrahepatic Cholestasis", <u>Nat Genet</u> , (1998),20:233-238	
		SUZUKI, H , et al., "Excretion of GSSG and Glutathione Conjugates Mediated by MRP1 and cMOAT/MRP2", <u>Semin Liver Dis</u> , (1998),18:35-376	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

**Application Number** 10/729,861**Filing Date** December 5, 2003**First Named Inventor** Cui, Yunhai**Group Art Unit** 1641**Examiner Name** Unknown

Sheet 4 of 4

**Attorney Docket No:** 1710.002US1**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		TERASAKI, M , et al., "Localization of Endoplasmic Reticulum in Living and Glutaraldehyde-Fixed Cells with Fluorescent Dyes", <u>Cell</u> , (1984),38:101-108	
		TOJO, A , et al., "Immunohistochemical Localization of Multispecific Renal Organic Anion Transporter 1 in Rat Kidney", <u>J Am Soc Nephrol</u> , (1999),10:464-471	
		WANG, R , et al., "Targeted Inactivation of Sister of P-Glycoprotein Gene (SPGP) in Mice Results in Nonprogressive but Persistent Intrahepatic Cholestasis", <u>Proc Natl Acad Sci USA</u> , (2001),98:2011-2016	
		WHELAN, G , et al., "A Direct Assessment of the Importance of Conjugation for Biliary Transport of Sulfobromophthalein Sodium", <u>J Lab and Clin Med</u> , (1970),75:542-557	

**EXAMINER****DATE CONSIDERED**

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached